

STARIK, I.Ye.; SHEYDINA, L.D.; IL'MENKOVA, L.I.

State of protactinium in aqueous solutions. Part 6: Adsorption  
properties of protactinium. Radiokhimia 4 no.1:~~44-49~~ '62.  
(MIRA 15:4)  
(Protactinium) (Adsorption)

Study of the kinetics ...

S/186/62/004/003/011/022  
E075/E436

distribute themselves between the surface of the minerals and the solution, alongside the indicator ions. For sufficiently acid solutions ( $> 1N$ ) the kinetics of the first stage of leaching are determined by the rapidity of formation of the adsorption equilibrium between the solution and mineral. The time for this process is not longer than 60 min. Much more time is needed for weakly acid solutions. The results for the leaching of monazite with 0.07 N  $H_2SO_4$ , 0.23 and 11.1 N HCl show that the equilibrium times are 8, 3 and 1 h respectively. There are 5 figures and 4 tables. ✓

SUBMITTED: May 22, 1961

Card 2/2

STARIK, I.Ye.; LOVTSYUS, G.P.; SOBOTOVICH, E.V.; GRASHCHENKO, S.M.;  
SHATS, M.M.; LOVTSYUS, A.V.

Isotopic composition of lead in meteorites in connection with their  
origin. Biul.Kom.po opr.abs.vozr.geol.form. no.5:12-25 '62.  
(MIRA 15:11)

(Meteorites) (Lead--Isotopes)

STARIK, I.Ye.; VOROB'YEV, G.G.; SOBOTOVICH, E.V.; SHATS, M.M.;  
GRASHCHENKO, S.M.

Origin and age of tektites. Biul.Kom.po opr.abs.vozr.geol.form.  
no.5:26-34 '62. (MIRA 15:11)  
(Tektite) (Lead--Isotopes)

STARIK, I.Ye.; ZHARKOV, A.P.

Use of radiocarbon dating for studying the processes of recent  
sedimentation. Biul.Kom.po opr.abs.vozr.geol.form. no.5:35-42  
'62. (MIRA 15:11)

(Radiocarbon dating) (Deep-sea deposits)

STARIK, I.Ye.; ARSLANOV, Kh.A.

New data on the age of some radiocarbon dated Quaternary sediments  
in the European part of the U.S.S.R. Biul.Kom.po opr.abs.vozr.  
geol.form. no.5:43-47 '62. (MIRA 15:11)  
(Radiocarbon dating)

STARIK, I.Ye.; STARIK, F.Ye.; YELIZAROVA, A.N.

Determination of protactinium and actinium in uraninite. Biul.Kom  
po opr.abs.vozr.geol.form. no.5:72-75 '62. (MIRA 15:11)  
(Uraninite) (Geological time)

S/026/62/000/005/004/010  
D036/D113

AUTHORS: Starik, I.Ye., Corresponding Member (see Association) and  
Sobotovich, E.V., Candidate of Chemical Sciences (Leningrad)

TITLE: The age of the Earth

PERIODICAL: Priroda, no. 5, 1962, 75-80

TEXT: This is a popular description of methods of determining the age of the Earth, particularly radioactive methods based on the contents of radioactive decay products, such as lead and strontium, in rock and meteor samples. The authors themselves analyzed 14 iron meteorites, 5 of which contained lead of the same isotopic composition as found in the "Devil's Canyon" meteorite, while in 9 this content corresponded to that of terrestrial mineral lead tens to hundreds of millions of years old. The Yardymly (Azerbaydzhan) meteorite is said to belong to the latter group of meteorites. Figures given for the Earth's age tally with those generally accepted.

ASSOCIATION: AN SSSR (Starik)

Card 1/1



S/534/62/000/022/001/002  
IO33/I240

AUTHORS: Starik, I.Ye., Sobotovich, E., Shats, M.M. and  
Crashenko, S.M.

TITLE: The origin of tektites

SOURCE: Akademiya nauk SSSR, Komitet po meteoritam.  
Meteoritika. no. 22. Moscow, 1962, 97-103

TEXT: The data on concentration of U and Pb, and the isotopic composition of the latter, for 7 samples of tektites, were treated mathematically in order to determine their age and possible origin. A few different methods show that the age of tektites is practically equal to zero. The isochrone equations calculated by the least squares method

Card 1/2

STARIK, I.Ye.; BARBANEL', Yu.A.

Certain functions characterizing the state of a substance in solution. Dokl. AN SSSR 146 no.6:1352-1355 0 '62. (MIRA 15:10)

1. Chlen-korrespondent AN SSSR (for Starik).  
(Solution (Chemistry))

AFANAS'YEV, G.D., otv. red.; BARANOV, V.I., prof., zam. otv. red.;  
SHCHERBAKOV, D.I., akademik, red.; FOLKANOV, A.A., akademik  
red.[deceased]; STARIK, I.Ye., redaktor;  
VINOGRADOV, A.P., akademik, red.; GERLING, E.K., prof.,  
red.; PEKARSKAYA, T.B., kand. geol.-min. nauk, red.;  
BORSUK, A.M., red.izd-va; SIMKINA, G.S., tekhn. red.

[Transactions of the 11th session of the Commission on the  
Determination of the Absolute Age of Geological Formations,  
May 12-27, 1963] Trudy odinnadtsatoi sessii...; 12-27 maia  
1963 g. Moskva, Izd-vo AN SSSR, 1963. 390 p.  
(MIRA 17:4)

1. Akademiya nauk SSSR. Komissiya po opredeleniyu absolyut-  
nogo vozrasta geologicheskikh formatsiy. 2. Chlen-korrespon-  
dent AN SSSR (for Afanas'yev, Starik).

2

I. Ye. STARIK, Yu. V. KUZNETSOV, Ye.P. PETRYAYEV, V.K. LEGIN (USSR)

"Some problems of the geochemistry of radioactive isotopes."

Report presented at the Conference on Chemistry of the Earth's Crust,  
Moscow, 14-19 Mar 63.

STARIK, I.YE., PETROV, E.R.

Some problems of the geochemistry of radioactive isotopes.

Report to be submitted for the Chemistry of the Earth Crust, Geochemical Conference, Moscow, USSR, 14-19 Mar 63

S/007/63/000/003/001/003

AUTHOR: ~~Starik, I. Ye.~~ Sobotovich, E. V., Shats, M. M.  
 TITLE: On the problem of origin of meteorites and tectites  
 PERIODICAL: Geokhimiya, no. 3, 1963, 245-253

TEXT: Article considers experiments in determining the time of formation of various stages of meteoritic bodies by use of the isotope of lead content. Differences in amounts of lead isotopes detected in two groups of meteorites allowed construction of isochrones with coordinates of  $Pb^{207}/Pb^{204}$ ,  $Pb^{206}/Pb^{204}$ . The tangent of isochrone angle of inclination permitted estimation of the time required to consolidate the meteoritic body depending upon differentiation time of the silicate and metallic phases. Equations for the isochrones are: Group I (containing primary lead):

$$Pb^{207}/Pb^{204} = 3.32 + 0.75 Pb^{206}/Pb^{204} \quad (a)$$

Group II: (containing more radioactive lead)

$$Pb^{207}/Pb^{204} = 9.31 + 0.36 Pb^{206}/Pb^{204} \quad (b)$$

In spite of this, the considerable error of equation (a) and present state of

Card 1 of 2

S/007/63/000/003/001/003

On the problem of origin....

knowledge of the composition and structure of meteorites do not allow firmly establishing genetic connections between stone and iron meteorites.

Concluded that in spite of further studies showing the abundance of uranium, thorium, lead, and lead isotopes in tectites, their relatively young age does not contradict the cosmic or mixed theory of tectite origin.

Card 2 of 2

STARIK, I.Ye.; YELIZAROVA, A.N.; KUZNETSOV, Yu.V.

Determination of the age of oceanic deposits by the ionium-  
protactinium method. Radiokhimiia 5 no.2:154-157 '63.

(MIRA 16:10)



STARIK, I.Ye.; ARSLANOV, Kh.A.; KLENER, I.R.

Improved techniques for the chemical preparation of samples for  
radiocarbon dating by the scintillation method. Radiokhimiia 5  
no.2:198-205 '63. (MIRA 16:10)

STARIK, I.Ye.; IL'MENKOVA, L.I.

Complex formation of protactinium in acid nitric acid solutions.  
(MIRA 16:10)  
Radiokhimiia 5 no.2:236-244 '63.

STARIK, I. I.; ICHMENKOVA, I. I.

State of the microquantities of elements in aqueous solutions.  
Cation complexes of protactinium. Radiokhimiia 5 no. 6:  
679-683 '63. (MIRA 17:7)

STARIK, I.Ye.; KUZNETSOV, B.S.; AMPELOGOVA, N.I.

Adsorption of polonium by glass and paper filters in the  
presence of salts. Radiokhimiia 5 no.3:304-311 '63. (MIRA 16:10)

(Polonium) (Adsorption)

STARIK, I.Ye.; SOBOTOVICH, E.V.

Geochemistry of lead isotopes. Izv. AN SSSR. Ser.geol. 28  
no.3:40-53 Mr '63. (MIRA 16:2)

1. Radiyevyy institut imeni V.G. Khlopina, Leningrad.  
(Lead isotopes)

STARIK, I.Ye.

Vladimir Ivanovich Vernadskii; on the 100th anniversary of his birth. Ukr.  
khim.zhur. 29 no.3:235-244 '63. (MIRA 16:4)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

STARIK, I.; BOBROV, L.; SHUKOLYUKOV, Yu., kand.khim.nauk

Atomic calendar of a planet. Tekh.mol. 31 no.1:34-36 '63. (MIRA 16:3)

1. Chlen-korrespondent AN SSSR (for Starik).  
(Geological time) (Radioisotopes)

L 12420-63

EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3001415

S/0020/63/150/004/0904/0906

AUTHOR: Starik, I. Ye.; Aleksandruk, V. M.

TITLE: The application of isotope spectral analysis to the strontium method for determination of age

SOURCE: AN SSSR. Doklady, v. 150, no. 4, 1963, 904-906

TOPIC TAGS: determination of age in minerals, isotope spectra, spectral method, geochronological problems, lipidolit, purple muskovite, biotit, mass spectrometer

ABSTRACT: The relative and absolute determination of Sr sup 87 in minerals for the purpose of age determination has been accomplished by the Rb-Sr isotope - spectral method. The obtained accuracy of the relative content of Sr sup 87 is greater compared to the accuracies previously published and therefore, it is satisfactory for the solution of a number of geochronological problems. The results of age determination of minerals such as lipidolit, purple muskovite and biotit determined by two different methods with Rb sup 87 and Sr sup 87 isotopes are in good agreement with each other. The time required for an analysis is much less than the time required for an analysis with a mass spectrometer. "The

Card 1/1



L 22537-65 EWT(m)/EPF(c)/EPA(w)-2/EWP(j)/T/EWP(t)/EWP(b) Pc-4/Pr-4/Pab-10  
DIAAP RWH/RM/WW/JD

ACCESSION NR: AP4043549

S/0020/64/157/004/0926/0929

AUTHORS: Starik, I. Ye. (Corresponding member AN SSSR, Deceased);  
Ginzburg, F. L.; Rayovskiy, B. N.

TITLE: A study of the state of radioactive isotopes in extremely dilute solutions by a diffusion method

SOURCE: AN SSSR. Doklady\*, v. 157, no. 4, 1964, 926-929

TOPIC TAGS: diffusion, diffusion coefficient, radioactive isotope, Pu (IV), Zr (IV), Th (IV), Ce (III), Am (III), Cs (I), Sr (II), Cs<sup>137</sup>, Sr<sup>90</sup>, Ce<sup>144</sup>, Th<sup>234</sup>, mean ionic charge, polymerization, hydrolytic polymerization product, viscosity, colloidal polymer

ABSTRACT: The diffusion coefficients of Pu (IV), Zr (IV), Th (IV), Ce (III), Am (III), Cs (I) and Sr (II) were measured and these values were used in studying the hydrolytic polymerization products and determining the mean ionic charge of the isotopes Cs<sup>137</sup>, Sr<sup>90</sup>, Ce<sup>144</sup>, and Th<sup>234</sup>. Measurements were made by the open tube capillary method described by J.S. Anderson, K. Saddington (J. Chem. Soc., 1949, 381). The pH of the solutions was adjusted to counteract adsorption onto the capillary wall: for Pu (IV) and Zr (IV)-- no less

Card 1/4

L 22537-65

ACCESSION NR: AP4043549

than 1 molar; for Th (IV), Ce (III), Am (III)-- not under pH 2; for Cs (I), Sr (II)-- up to pH 11.5. Comparison of the diffusion coefficients for Pu (IV) and Ce (III) obtained above with values obtained by a method described by I.Ye. Starik and A.I. Yurtov (Radiokhimiya, 6, 4 (1964)) indicated the two methods yielded similar results. Viscosities were measured with an Ostwald viscometer; temperatures were  $25.0 \pm 0.05^\circ\text{C}$ ; all concentrations were under  $1 \times 10^{-5}$  gm. ion/l. Plotting the change in  $D/T$  (which was considered to show the change in the radius of the diffused particle) vs. acidity of the solution (fig. 1) showed polymerization occurred at about 0.3 M HCl for Zr (IV), at pH 1.4 for Pu (IV) and pH 3.7 for Th (IV). Solubility products were determined:  $\text{Th}(\text{OH})_4$  --  $1 \times 10^{-46}$ ,  $\text{Pu}(\text{OH})_4$  --  $1 \times 10^{-55}$ , and  $\text{Zr}(\text{OH})_4$  --  $1 \times 10^{-59}$ . The polymers reached colloidal dimensions at a slightly lower hydrogen ion concentration than that at which the solubility product was reached. The coefficient of diffusion of zirconium in alkaline solutions showed it formed negatively charged particles beyond pH 7.5. Changing the  $[\text{H}^+]$  from 0.3 to 3 moles/l. did not cause any change in the rate of Zr and Th diffusion. This was assumed to confirm that ion mobility in dilute solutions is determined by the solvent structure. The

Card 2/4

L 22537-65

ACCESSION NR: AP4043549

increase in  $D/T$  for Sr (II), Ce (III) and Pu (IV) in more concentrated solutions was considered due to non-ideal solution and ion dehydration or change in complex composition. The relative decrease in the diffusion coefficients of ions on increasing their concentration from  $10^{-5}$  to  $10^{-3}$  gm. ions/l. was determined. Extrapolation of the  $D_0/T - \sqrt{C_{H^+}}$  curves to zero  $[H^+]$  gave values for the diffusion rates of Ce (III) and Sr (II) very close to values obtainable by the Nernst equation. The mean charge was calculated for the following ions, based on the Nernst equation and on correlation of experimental data: Sr (II)  $\approx 2.0$ ; Ce (III)  $\approx 3.0$ ; Th (IV)  $\approx 2.4$ ; Zr (IV)  $\approx 0$ ; Pu (IV)  $\approx 2.2$ . It was concluded that the relationship between the diffusion coefficient and the concentration of the diffused ion may be used to determine its mean charge in dilute solutions. Orig. art. has: 2 figures and 1 equations.

ASSOCIATION: None

SUBMITTED: 25Mar64

ENCL: 01

SUB CODE: IC, GC

NR REF SOV: 014

OTHER: 010

Card 3/4

L 22537-65

ACCESSION NR: AP4043549

ENCLOSURE: 01

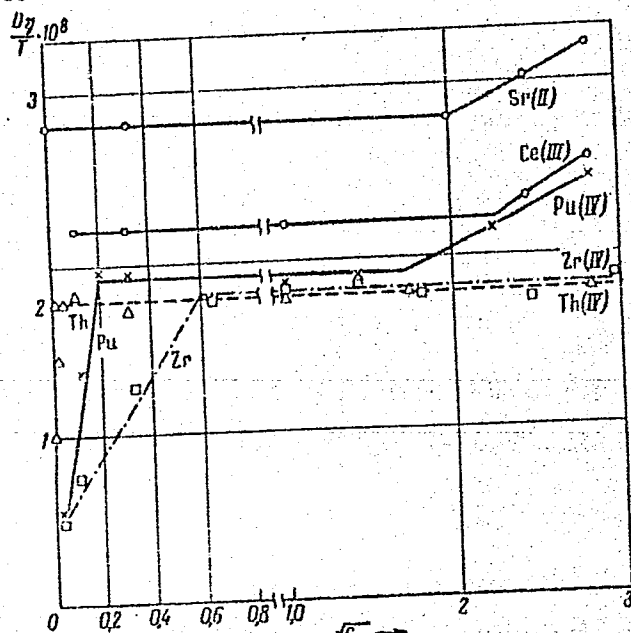


Fig. 1  
Relationship between  $D/T$  and  
acidity of the solution.

STARIK, I.Ye.[deceased]; ARSLANOV, Kh.A.; MALAKHOVSKIY, D.B.

Age of the Mga interglacial marine formations according to  
radiocarbon dating. Dokl. AN SSSR 157 no.6:1369-1379 Ag '64.  
(MIRA 17:9)

1. Chlen-korrespondent AN SSSR (for Starik).

L 27618-65 EWT(1)/EWT(m)/EPA(s)-2/EWP(t)/EWP(b) Pt-10 DIAAP/IJP(c) JD/JG/GW  
 ACCESSION NR: AP5001513 S/0020/64/159/005/1055/1058

AUTHOR: Starik, I. Ye. (Deceased) (Corresponding member AN SSSR); Aleksandruk,  
 V. M.

TITLE: Spectral method of determining the Rb-Sr absolute age of rocks and  
 minerals

SOURCE: AN SSSR. Doklady, v. 159, no. 5, 1964, 1055-1058

TOPIC TAGS: isotopic dating, rock age, mineral age, rubidium analysis, flame  
 spectrophotometry, isotope dilution technique, strontium analysis, lepidolite  
 dating, granite dating, microcline dating

ABSTRACT: The isotopic-spectral method was used to measure the Rb-Sr absolute  
 age. Rb was determined with a flame spectrophotometer (hydrogen - air flame) by  
 means of the 7948 A line. The ratio  $Sr^{87}/Sr$  was measured with an isotopic-  
 spectral device; Sr was determined by the isotope dilution technique, after being  
 first separated from accompanying impurities. Results of the measurements per-  
 formed on lepidolite, various samples of granite, and microcline are tabulated.  
 The maximum deviation in age values from the data of mass-spectrometric results  
 was 10% (the average was 6%). The sensitivity of the isotopic-spectral deter-  
 Card 1/2

L 27618-65

ACCESSION NR: AP5001513

2  
mination was adequate for the analysis of samples containing  $10 \times 10^{-6}$  g Sr per gram, in samples weighing no more than 1 gram. The analysis required 40-50 min. "The authors thank E. K. Gerling for supplying the samples and results of mass-spectrometric analyses, and A. V. Lotsyus for determining the isotopic strontium composition of the standard samples." Orig. art. has: 2 tables and 1 formula.

ASSOCIATION: none

SUBMITTED: 17Jun64

ENCL: 00

SUB CODE: ES, IC

NO REF SOV: 004

OTHER: 001

Card 2/2

STARIK, I.Ye. [deceased]; AMPELOGOVA, N.I.; KUZNETSOV, B.S.

Hydrolysis of polonium in perchloric acid solutions. Radiokhimiya 6  
no.5:519-524 '64. (MIRA 18:1)

Complex formation of polonium with a chlorine ion in aqueous and aqueous-  
acetone solutions. Ibid.:524-527



STARIK, I. Ye.; LAZAREV, K.F.

Studying the comparative limivation of the isopes of radium,  
uranium, and munnzite. Metod. spr. abs. vozr. geol. obr. no.6:  
24-31 '64 (MIRA 18:2)

L 55072-65 EWT(m)/EWP(j)/T/EWP(t)/EWP(b) Pc-4 IJP(c) JD/RM

ACCESSION NR: AP5017995

UR/0186/64/006/005/0519/0524

21  
B

AUTHOR: Starik, I. Ye. (Deceased); Ampelogova, N. I.; Kuznetsov, B. S.

TITLE: Hydrolysis of polonium in perchloric acid solutions

SOURCE: Radiokhimiya, v. 6, no. 5, 1964, 519-524

TOPIC TAGS: hydrolysis, polonium, perchloric acid, solution property

Abstract: The constants of the complex formation of  $Po^{+4}$  with acetylacetone were determined in an investigation of the extraction of polonium by solutions of acetylacetone in benzene from mixed solutions of  $HClO_4$  +  $NaClO_4$  (ionic strength 0.1, pH of the aqueous phase from 1.0 to 2.1). Variation of the polonium concentration in the working solutions from  $2 \cdot 10^{-13}$  to  $7 \cdot 10^{-12}$  gram atom per liter did not influence the value of the distribution coefficient. The constants of formation of a number of mixed hydroxoacetylacetonate complexes of polonium were determined. The constants of formation of the hydroxo-complexes  $[PoOH]^{+3}$ ,  $[Po(OH)_2]^{+2}$ ,  $[Po(OH)_3]^+$ , and  $[Po(OH)_4]^0$  were  $(5 \pm 2) \cdot 10^{12}$ ,  $(2.5 \pm 1) \cdot 10^{25}$ ,  $(2.2 \pm 2) \cdot 10^{38}$ , and  $(2.5 \pm 1) \cdot 10^{50}$ , respectively. The constants of the successive reactions of hydrolysis of Po at an ionic strength of the solution equal to 0.1 were cal-

Card 1/2

L 55072-65

ACCESSION NR: AP5017995

culated:  $K_1 = 0.08$ ,  $K_2 = 6.3 \cdot 10^{-3}$ ,  $K_3 = 8.7 \cdot 10^{-4}$ ,  $K_4 = 1.6 \cdot 10^{-5}$ .  
The percent contents of the various hydrolysis products of polonium were  
calculated and plotted as a function of the solution pH.  
Orig. art. has 13 formulas, 6 graphs, and 1 table.

ASSOCIATION: none

SUBMITTED: 17Dec63

NO REF SOV: 006

ENCL: 00

OTHER: 009

SUB CODE: IC, GC

JPRS

Card

2/2 *YMB*

L 55334-65 EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EWP(t)/EWP(b)/EWA(c) Pc-4/Pr-4/  
Ps-4/Pu-4 IJP(c)/RPL JD/WW/JG/GS/RM

ACCESSION NR: AT5015390

UR/0000/65/000/000/0123/0127  
541.183.5:546.794

AUTHOR: Starik, I. Ye. (Deceased); Ampelogova, N. I.

TITLE: Adsorption of polonium by polytetrafluoroethylene

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Soosazhdeniye i adsorbtsiya radioaktivnykh elementov (Coprecipitation and adsorption of radioactive elements). Moscow, Izd-vo Nauka, 1965, 123-127

TOPIC TAGS: polonium adsorption, polytetrafluoroethylene, ion exchange resin, polonium extraction, tributyl phosphate, polonium perchlorate

ABSTRACT: The article deals with the adsorption of polonium on polytetrafluoroethylene and its extraction with a 10% solution of tributyl phosphate (TBP) in benzene from hydrochloric, nitric, and perchloric acid solutions. In addition, the effect of the presence of salts (KCl, NH<sub>4</sub>Cl) on the adsorption of Po from HCl solutions is studied. Particular attention is given to the methods of preparing the active solutions and to the effect of this factor on the adsorption and extraction of Po. It was shown that the adsorption of Po is a function of the state of this element in the solution and increases markedly when hydroxy

Card 1/2

L 55334-65

ACCESSION NR: AT5015390

complexes of polonium  $[(Po(OH)_x Cl_{4-x})^0]$ , appear in the solution. Chloride, nitrate, and perchlorate complexes of Po are only slightly adsorbed by polytetrafluoroethylene. The presence of neutral salts has a desalting effect on the adsorption of polonium in the form of hydroxy complexes and decreases the adsorption of the chloride complexes of Po. The formation of polonium perchlorate  $Po(ClO_4)_4$  is very likely at a concentration of  $HClO_4 \geq 2.5$  M. The presence of these neutral complexes, readily extractable by tributyl phosphate, accounts for the high percentages of extraction of Po from perchloric acid solutions. In nitric acid solutions, the proportion of neutral Po complex is small, and for this reason the extraction is low. Orig. art. has: 2 figures and 4 tables.

ASSOCIATION:None

SUBMITTED: 28Dec62

ENCL: 00

SUB CODE: IC,GC

NO REF SOV:007

OTHER: 001

50  
Card 2/2

STARIK, I.Ye. [deceased]; AMPELOGOVA, N.I.

Extraction method of studying polonium complex formation with  
chlorine and perchlorate ions. Radiokhimiia 7 no.6:658-663 '65.  
(MIRA 19:1)

ACC NR: AR6024054

SOURCE CODE: UR/0124/66/000/004/A009/A009

AUTHOR: Starikov, I. Ya.

TITLE: Correction of the gyrohorizon by means of a gyro pendulum

SOURCE: Ref. zh. Mekhanika, Abs. 4A62

REF SOURCE: Tr. Leningr. in-t aviats. priborostr., vyp. 44, 1964, 83-89

TOPIC TAGS: gyrohorizon, gyroscopic device, pendulum, error correction, forced oscillation

ABSTRACT: The gyrohorizon, the correcting signals for which are formed from the readings of a gyro pendulum, is examined. The amplitude of the forced oscillations of the gyrohorizon in this case is smaller than with correction from a physical pendulum. It is noted that with this method of correction the duration of transient processes increases appreciably. [Translation of abstract] L. Ya. Roytenberg

SUB CODE: 17

Card 1/1

STARIK, I.Ye. [deceased]; KUZNETSOV, B.S.; AMPELOGOVA, N.I.

Behavior of polonium in ketones and mixed aqueous acetone solutions. Radiokhimiia 7 no.2:196-199 '65.

Effect of ketones on the behavior of polonium in hydrochloric acid solutions. Ibid.:199-203

(MIRA 18:6)



STARIK, L.K.

Interaction of a quasi-linear oscillatory system with a source  
of energy in the presence of delayed coupling. Trudy Sem. po  
teor. diff. urav. s otklon. arg. 3:119-132 '65.

(MIRA 19:1)

L 47057-66 EWT(1)

ACC NR: AT6014864

SOURCE CODE: UR/3125/65/003/000/0119/0132

AUTHOR: Starik, L. K.

ORG: none

TITLE: Interaction of a quasilinear oscillatory system and energy source in the presence of coupling delay

SOURCE: Moscow. Universitet druzhby narodov, Seminar po teorii differentsial'nykh uravneniy s otklonyayushchimsya argumentom. Trudy, v. 3, 1965, 119-132

TOPIC TAGS: harmonic oscillation, oscillating system, parametric resonance

ABSTRACT: The effect of coupling delay on the parametric interaction of an oscillatory system with its energy source is treated with consideration limited to oscillations near the harmonics in the range of basic parametric resonance. Each of the three delay factors is treated separately, the other two being held equal to zero, and it is assumed that the source characteristic is a positive decreasing function in keeping with most practical problems. Two cases are distinguished: 1) the case of a "rigid" characteristic of elastic force; 2) the case of a "weak" characteristic of elastic force, the latter being more dependent on delay. The simultaneous presence of all three delay factors is also treated. It is concluded that delay in the coupling

Card 1/2

STARIK, M. Ye.,

"Radio Direction Finders," (Bk.), 1941.

RUBINSHTEYN, Yakov Moiseyevich [deceased]; SPARIK, M.Ye., dotsent, retsensent;  
BORODIN, N.I., dotsent, kand.tekhn.nauk, red.; PERSMAN, A.A.,  
dotsent, kand.tekhn.nauk, red.; CHERNYAK, S.I., dotsent, kand.tekhn.  
nauk, red.; DENISOV, K.N., red.izd-va; DROZHZHINA, L.P., tekhn.red.

[Radio wave propagation and antenna feeding devices] Rasprostranenie  
radiovoln i antenno-fidernye ustroistva. Leningrad, Izd-vo "Morskoi  
transport," 1960. 387 p. (MIRA 13:7)  
(Radio waves) (Antennas (Electronics))

61894-65 EEO-2/EWT(d)/EEO-4/EED-2 Pn-4/Po-4/Pp-4/Pg-4/Pk-4/Pl-4/Pq-4: EC

AM5010320

BOOK EXPLOITATION

UR/  
621.396.982.6

63  
B+1

Kukes, Il'ya Semenovich; Starik, Mark Yevseyevich

Principles of radio direction finding (Osnovy radiopelengatsii), Moscow, Izd-vo "Sovetskoye radio", 1964. 640 p. illus., biblio., index. Errata slip inserted. 7,000 copies printed.

TOPIC TAGS: direction finder, direction finding, antenna, antenna theory, goniometer, magnetic field, parameter

PURPOSE AND COVERAGE: The book sets forth the principles and methods of radio direction finding. Various radio direction finding systems are described, and methods of designing them and their antenna systems are treated. Also, the author examines radio direction finding errors and peculiarities of their adjustment, correction, and employment under various circumstances. This study is intended to serve as a textbook for university students who are studying radio direction finders. It can also be used by students and radio engineers as a handbook for designing different radio direction finding systems. Finally, the book can be used by technical personnel who operate radio direction finding

Card 3/3

L 61894-65

AM5010320

equipment and carry out the organization of its employment. In general, the book will be useful for a wide circle of radio specialists who are concerned with directional radio reception.

TABLE OF CONTENTS (abridged):

Foreword --	3
Ch. I. The problems of radio direction finding --	5
Ch. II. Principles and methods of radio direction finding --	11
Ch. III. Antenna systems for the radio direction finder --	76
Ch. IV. Instrument errors --	168
Ch. V. Influences of terrain and environment --	235
Ch. VI. Errors of the radio direction finder which are related to the propagation of radio waves --	825
Ch. VII. Antenna system designs for the radio direction finder --	336
Ch. VIII. Visual radio direction finders --	411
Ch. IX. Testing radio direction finders --	511
Ch. X. Various uses for the radio direction finder --	542
Ch. XI. Accuracy in determining location by radio directions --	571

Card 2/3

I 61894-65

AM5010320

Ch. XII. Plotting radio directions on the map -- 598

Supplement I. Calculating the frame's parameters -- 609

Supplement II. Deducing formulae for magnetic fields in the multicoil goniometer  
-- 614

Supplement III. General expressions for parameters of the elliptical field -- 616

Supplement IV. Determining the direction of the true meridian -- 619

Bibliography -- 622

Subject index -- 632

SUB CODE: NG, EC

SUBMITTED: 26Sep64

NO REF SOV: 083

OTHER: 088

Card *dm*  
3/3

C2g.R  
C2d(1).R  
DE3.R

STARIK, M. YE.

Candidate of technical sciences

Delivered a paper "Korotkovolnovnyye pelengatornyye anteny"  
at Nauchno-tekhnicheskaya konferentsiya Leningradskiy  
Elektrotekhnicheskoy Institut im Ul'yanova (Lenina), June  
1946

Source: Elektrichestvo, 1947, No. 1, p. 75

P-5893



STARIK, N.A.; SEREBRENNIKOV, V.V.

Compounds of some rare-earth elements with cobalt, cadmium,  
and zinc complexons. Zhur. neorg. khim. 10 no.1:279-281  
Ja '65. (MIRA 18:11)

1. Submitted Nov. 20, 1963.

STARIK, P. M.

Magnetic properties of semiconductors. K. D. Tovstyuk.

- This presentation consisted of the following papers:

- Anisotropy of susceptibility of semiconductors. K. D. Tovstyuk, E. I. Slynko, I. M. Stakira, O. M. Boretz.

Magnetic and thermomagnetic properties of HgTe, PbTe, HgSe, PbSe. K. D. Tovstyuk, M. P. Gavaleshko, Ya. S. Budzhak, P. M. Starik, P. I. Voronyuk.

Magnetic susceptibility of CdTe and ZnTe. I. V. Potykevich, A. V. Savitskiy.

Magnetic properties of the system HgTe-CdTe. K. D. Tovstyuk, I. M. Rarenko, I. V. Potykevich.

Anisotropy of the thermal conductivity of CdSb. I. M. Pilat, L. I. Anatychnyuk.

Electrical, magnetic, and optical properties of the system In<sub>2</sub>Te<sub>3</sub>-CdTe. I. V. Potykevich, A. I. Belyayev, S. V. Chapura.

Properties of crystals of CdSb doped with elements of groups IV and VI. S. M. Gusev.

Starik, P. M. Conference on Semiconducting Compounds,

L 14615-66 EWT(1)/EWT(m)/EWG(m)/T/EWP(t)/EWP(b) LJP(c) RJW/JD/GG  
ACC NR: AT6002262 (N) SOURCE CODE: UR/2564/65/006/000/0281/0283

AUTHOR: Starik, P. M.; Voronyuk, P. I.

ORG: none

TITLE: Growing of PbTe single crystals by the Czochralski method [Paper presented at the  
Third Conference on Crystal Growing held in Moscow from 18 to 25 November, 1963]

SOURCE: AN SSSR. Institut kristallografi. Rost kristallov, v. 6, 1965, 281-283

TOPIC TAG: lead compound, telluride, single crystal growing

ABSTRACT: PbTe single crystals were grown at pressures from 1.5 to 5 atm in argon in an apparatus customarily employed for the Czochralski method. The composition of the crystallizing phase differed from that of the melt: the latter was richer in lead. Liquation was thought to play an important part during the crystal growth. The major part of the crystal had p-type conductivity; only the lowest part had n-type conductivity. The crystals obtained were 15 mm in diameter and up to 30 mm long. The direction of growth coincided with the [100] direction. The pulling rate was about 10 mm/hr, and the rotation rate of the

Card 1/2

L 14615-66  
ACC NR: AT6002262

seed, 30 rpm. Measurements on p-type crystals showed that in the direction of growth they had a low resistance gradient. In the radial direction the inhomogeneity did not exceed 3%. The carrier concentration in p-type samples was  $3-4 \times 10^{18} \text{ cm}^{-3}$ . Orig. art. has: 3 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 003

TS  
Card 2/2

L 63341-65- EWA(h)/EWT(1)/EWT(m)/EWG(m)/EMP(b)/T/EMP(t) Pz-6/Feb IJP(c) RIDW/AT/  
 ACCESSION NR: AP5017338 JD UR/0181/65/007/007/2246/2247

36  
33  
B

AUTHOR: Starik, P. M.

TITLE: Width of the forbidden band in PbTe

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2246-2247

TOPIC TAGS: semiconductor, forbidden band, Hall effect

ABSTRACT: The width of the forbidden band in a semiconductor may be determined from measurements of conductivity and Hall coefficient vs. temperature in the region of intrinsic conductivity. This study of monocrystalline PbTe with bismuth as the impurity permitted estimation of the thermal width of the forbidden zone. Electric conductivity and Hall coefficient were measured in p-type samples with different degrees of compensation. Current carrier concentrations ranged over a wide interval from  $10^{18}$  to  $10^{15}$  cm<sup>-3</sup>. The forbidden band width was estimated from Hall coefficient data and conductivities in the region of hybrid conductivity. At the temperature inversion of the Hall effect, the conductivity  $\sigma$  of a given sample is equal to the conductivity  $\sigma_i$  of the sample with intrinsic conductivity at the same temperature, if only the relative Hall mobilities are equal to the drift mobilities. The

Card 1/2

L 63341-65

ACCESSION NR: AP5017338

Hall effect inversion was observed for various samples in a wide enough temperature interval to give  $\sigma_i$  from 0 to 200°C. The Hall mobilities depend on temperature according to a  $T^{-5/2}$  law for the samples studied in the region of impurity conductivity. The assumption was made that at high temperatures in the region of hybrid conductivity the mobility depends on temperature in the same way. Moreover in PbTe the effective mass of electrons and holes increases with temperature as  $T^{0.4}$ . A graph of the temperature dependence of  $\sigma_i$  shows that the experimental data fit a straight line of slope 0.17 eV, with a mean square error of  $\pm 0.012$  eV. "The author expresses his thanks to K. D. Tovstyuk for his interest in the work". Orig. art. has: 1 figure.

ASSOCIATION: Chernovitskiy gosudarstvennyy universitet (Chernovtsy State University)

SUBMITTED: 16Jan64

ENCL: 00

SUB CODE: SS, EM

NO REF SOV: 001

OTHER: 004

Card 2/2

L 6810-65 EWT(m)/EWP(q)/EWP(b) AS(mp)-2/ASD(a)-5/AFWL/ESD(t)/RAEM(t)

RDW/JD

ACCESSION NR: AP4044646

S/0048/64/028/008/1321/1322

AUTHOR: Starik, P.M.; Voronyuk, P.I.

53

TITLE: Impurity levels in p-type <sup>1</sup>lead <sup>1</sup>telluride crystals /Report, Third All-Union Conference on Semiconductor Compounds held in Kishinev 16-21 Sept 1963/

SOURCE: AN SSSR: Izv. Seriya fizicheskaya, v.28, no.8, 1964, 1321-1322

TOPIC TAGS: semiconductor, impurity center, Hall constant, lead telluride

ABSTRACT: Lead telluride crystals grown from a melt of stoichiometric composition ordinarily exhibit p-type conductivity and a Hall constant that is independent of temperature in the extrinsic (impurity) conductivity region. It has been found that by subjecting such crystals to a low temperature (about 200°C) anneal one obtains crystals with a greatly reduced hole concentration, the Hall constants of which increase with decreasing temperature. Hall constant data are presented for one such crystal in three stages of anneal. The hole concentrations in the successive stages of the anneal were  $3 \times 10^{17}$ ,  $4.2 \times 10^{16}$  and  $1.9 \times 10^{16} \text{ cm}^{-3}$ , respectively, and the increments of the Hall constant in passing from 220 to 100°K were zero, 20% and 100%. It is argued that the change in the behavior of the Hall constant cannot be

1/2

L 6810-65

ACCESSION NR: AP4044646

0

ascribed to a change in the scattering mechanism, but must be due to changes in the number and kinds of impurity levels. In order to account for the data it was necessary to assume the existence of impurity levels of two types: deep levels with an activation energy of 0.04 eV and shallow levels with an activation energy close to zero. The concentration of the shallow levels (which are ascribed to the influence of excess Te atoms) was found to increase during the anneal, while that of the deep levels remained constant at  $10^{16} \text{ cm}^{-3}$ . The nature of the deep levels is not known, but it is suggested that they are probably due to extraneous impurities. Orig.art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: SS, ME

NR REF SCV: 000

OTHER:001

2/2



STARIK, P. M.

ACCESSION NR: AP4012028

S/0185/64/009/001/0026/0031

AUTHOR: Staryk, P. M.; Voronyuk, P. I.

TITLE: Impurity levels in p-type PbTe

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 9, no. 1, 1964, 26-31

TOPIC TAGS: current carrier, impurity, impurity atom, Hall effect, acceptor, impurity conductivity, impurity level, acceptor level

ABSTRACT: This work was carried out to determine why the annealing of PbTe crystals of the p-type at low temperatures causes great changes in their properties. The Hall effect and electric conductivity were measured on annealed single-crystal samples with a current carrier concentration of about  $10^{16} \text{ cm}^{-3}$ . A temperature dependence of the Hall effect is found in the region of impurity conductivity. This dependence is sufficiently well explained by the presence of two types of acceptor levels: shallow ones, assumed to be made up of excess Te atoms, with an activation energy  $\Delta E$  of about 0, the concentration of which changes during annealing, and relatively deep ones with  $\Delta E = 0.04 \text{ eV}$ , the concentration of which is unchanged during annealing. It is concluded that the deep levels are evidently

Card 1/2

ACCESSION NR: AP4012028

formed by impurity atoms and play a certain part in current carrier scattering at low temperatures. Orig. art. has 6 formulas, 5 figures and 1 table.

ASSOCIATION: Chernivets'ky'y Derzhuniversy\*tet (Chernovtsy State University)

SUBMITTED: 17Jun63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 001

OTHER: 002

Cord 2/2

STARIK - SMAGINA, A.S.

STARIK, I.Ye.; STARIK-SMAGINA, A.S.

Polarographic determination of uranium. Trudy Radiev. inst. AN  
SSSR 5 no.2:105-116 '57. (MIRA 10:8)

(Uranium) (Polarography)

STARIKIN, Yu. A. 9

USSR/Physics  
Anisotropy  
Magnetic Fields

Dec 48

"Forced Anisotropy," Yu. A. Starikin,  
Yenisei State Teachers Inst, 2 pp

"Zhur Eksper i Teoret Fiz" Vol XVIII, No 12

Relates that the outer electric and magnetic field on the optic isotropic medium could make it artificially anisotropic. This anisotropy develops in the Faraday and Cottonmutton phenomena (magnetic fields) and Kerr phenomena (electric fields). Submitted 30 Aug 48.

25/49T106

STARIKIN, Yu. A.

PA 61/49T105

USSR/Physics  
Relativity  
Dirac's Theory

Aug 49

"Conservation Laws in Dirac's Theory," Yu. A.  
Starikin, Yenisei State Teachers Inst, 4 pp

"Zhur Eksper i Teoret Fiz" Vol XIX, No 8

Derived laws of conservation of energy, impulse,  
and charge in Dirac's theory based upon equations  
of the single theory of a field (five-dimensional  
optics) developed by Yu. Rumer. Submitted  
9 Dec 48.

61/49T105

SOV/112-58-2-1844

Translation from: Referativnyi zhurnal, Elektrotehnika, 1958, Nr 2, p 7 (USSR)  
AUTHOR: Starikina, Yu. A.

TITLE: Modern Theory of Electric Breakdown of Solid Dielectrics — A Review  
(Sovremennaya teoriya elektricheskogo proboya tverdykh dielektrikov — obzor)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1956, Vol 91, pp 27-43

ABSTRACT: Some theories of solid-dielectric breakdown are criticized; it is pointed out that the most realistic evaluation of processes connected with breakdown are given by Franz' theory (W. Franz, Z. Phys., 1952, Vol 132, p 285; Z. angew. Phys., 1952, Vol 3, p 72; Erg. exakt. Naturwiss., 1953, Vol 27, p 1). However, Franz did not study the influence of duration on current for various field strengths. Variation of the state of electron conduction is considered theoretically with allowance for electron interaction with oscillations of crystal lattice, with external electric field, and with ionization and recombination processes. It is pointed out that the development of electron avalanche depends on the electric-field strength. Electron density in the conduction zone has been determined (considering the cause of electron transition

Card 1/2

Card 2/2

24(3), 24(6)

AUTHOR: Starikin, Yu.A.

SOV/139-59-1-27/34

TITLE: On the Mobility of Electrons in Non-Polar Crystals in Strong Electric Fields (O podvizhnosti elektronov nepolyarnykh kristallov v sil'nykh elektricheskikh polyakh)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1959, Nr 1, pp 154-163 (USSR)

ABSTRACT: The paper was presented at the Conference of Higher Educational Establishments on Dielectrics and Semiconductors, Tomsk, February, 1958. The electron drift velocity is calculated by the method suggested by Conwell (Ref 1) cf. Eq (3) of the present paper. Two cases are considered: (1) The electron energy acquired in the electric field in a single free path is much smaller than the average phonon energy. (2) The electron energy acquired in the electric field in one free path is much greater than the average phonon energy. The energy distribution of the electrons is calculated assuming that one can neglect collisions with lattice dislocations, inter-electron collisions and ionisation and recombination processes. Only the interaction of electrons with thermal lattice vibrations

Card 1/3

SOV/139-59-1-27/34

On the Mobility of Electrons in Non-Polar Crystals in Strong  
Electric Fields

and with the external electric field are taken into account. Two kinds of lattices are discussed: (a) non-polar crystals with simple atomic lattice and (b) non-polar crystals with a complex atomic lattice. In the case (a) the electron mobility in a weak electric field is independent of the external field, while in a strong electric field it is inversely proportional to the square root of the electric field. In the case (b) the mobility is inversely proportional to the square root of the electric field in strong electric fields and inversely proportional to the electric field for still higher fields. The results are in good qualitative agreement with the experimental data reported by Ryder (Ref 7). An estimate is also made of the relaxation time.

Card 2/3



SOV/139-59-1-27/34  
On the Mobility of Electrons in Non-Polar Crystals in Strong  
Electric Fields

There are 1 figure and 9 references, of which 3 are  
Soviet, 5 are English and 1 is a Russian translation  
from English.

ASSOCIATION: Institut Radiofiziki i elektroniki Sibirskogo  
Otdeleniya AN SSSR (Institute of Radio-Physics and  
Electronics of the Siberian Division of the Academy  
of Sciences of the USSR)

Card 3/3

SUBMITTED: April 11, 1958

STARIKOV, A., kand. tekhn. nauk

Technology of dredging by sweeper drags. Rech. transp. 20  
no. 12:34-37 D '61. (MIRA 14:12)

(Dredging)

STARIKOV, A., kand.tekhn.nauk

Use of earth-pumping equipment for the displacement of dredges.  
Rech. transp. 21 no.9:32-34 S '62. (MIRA 15:9)  
(Dredging machinery)

ZORINA, Ya., inzh.; STARIKOV, A., kand.tekhn.nauk

Improving the discharge system on 8P3U-type suction dredges.  
Rech.transp. 21 no.11:31-34 N '62. (MIRA 15:11)  
(Dredging machinery)

STARIKOV, A., kand. tekhn. nauk

What the tests of river dredges show. Rech. transp. 24 no.8:39-41  
'65. (MIRA 18:9)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ekonomiki i  
ekspluatatsii vodnogo transporta.

GOGOSOV, Vladimir Antonovich; STARIKOV, A.G., red.; PISTSOV, B.,  
tekhn. red.

[Basic trends of technological development in Kazakhstan] Os  
novnye napravleniia tekhnicheskogo progressa v Kazakhstane.  
Alma-Ata, 1960. 51 p. (MIRA 15:4)  
(Kazakhstan--Technological innovations)

STARIKOV, A. K.

On international flights. Grazhd. av. 13 no. 5:20-22 My '56.  
(MIRA 9:9)

1. Komandir korablya Tu-104.  
(Jet planes)

СТАРИКОВ, А.

86-5-24/24

AUTHOR: Starikov, A.K., Lt.Col., Mil. Pilot, First Class

TITLE: One Hundred Twenty Thousand Kilometers on a TU-104 Plane. 1. First Long-Distance Flight (120 tysyach kilometrov na samolete TU-104. 1. V pervom dal'nem polete).

PERIODICAL: Vestnik Vozdushnogo Flota, 1957, Nr 5, pp.90-96 (USSR)

ABSTRACT: The author writes about his experiences as chief pilot of the first Soviet passenger jet aircraft, the Tu-104. His crew consisted of the second pilot, Lt.Col. Yakovlev, N. Ya., air navigator Col. Bagrich, N.K. and radio operator Belyayev, N.K. After giving a detailed description of the plane's equipment, the author describes a long-distance flight, Moskva-Uzbekistan.

AVAILABLE: Library of Congress

Card 1/1



PERIKOV, A.A., voyennoy letchik, pervogo klassa, podpolkovnik.

One hundred and twenty thousand kilometers aboard the TU-104  
airplane. Part 2: Flight to England. Vest.Vozd.Fl. 10 n.6:92-95  
Fe '57. (PIRA 10:8)

(Aeronautics--Flights)  
(Jet planes)

STARIKOV, A.K., voyenny letchik pervogo klassa podpolkovnik.

One hundred and twenty thousand kilometers with the TU-104  
airplane. Vest.Vozd.Fl. 40 no.8:92-96 Ag '57. (MIRA 10:10)  
(Aeronautics--Flights)  
(Jet transports)

STARIKOV, Aleksey Nikanorovich; KLYACHKO, A.L., inzh., nauchnyy red.;  
ROZENBERG, A.S., red.izd-va; ROZOV, L.K., tekhn.red.

[Problems in construction economics] Voprosy ekonomiki stroi-  
tel'nogo proizvodstva. Leningrad, Gos.izd-vo lit-ry po stroit.,  
arkhit. i stroit.materialam, 1960. 162 p. (MIRA 13:6)  
(Construction industry)

STARIKOV, Aleksey Nikanorovich; MAKAROV, V.I., kand. tekhn. nauk,  
nauchnyy red.; LEPIN, A.E., red.; TIKHONOVA, I.M., tekhn.  
red.

[Reference book for the joiner and cabinetmaker] Spravochnaya  
kniga stoliara-stroitelia i mebel'shchika. Leningrad, Len-  
izdat, 1963. 414 p. (MIRA 16:5)  
(Carpentry--Handbooks, manuals, etc.)

STARIKOV, Aleksey Nikanorovich; LEPIN, A.E., red.; TIKHONOVA, I.M.,  
tekhn. red.

[Reference book for carpenters and furniture makers] Spra-  
vochnaia kniga stoliara-stroitel'ia i mebel'shchika. Le-  
ningrad, Lenizdat, 1963. 414 p. (MIRA 16:10)  
(Carpentry--Handbooks, manuals, etc.) (Furniture)

STARIKOV, A. S.

"Operating Conditions of the Pumping Installations of Sea and River Steam Dredges. (Method of Study; Computation of Characteristics; Analysis of Steady-state Conditions)." Min River Fleet USSR, Gor'kiy Inst of Engineers of Water Transport, Moscow, 1955. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: M-972, 20 Feb 56

STARIKOV, A.S., kand.tekhn.nauk

New type of suction terminals for dredges. Rech.transp. 17  
no.11:38-39 N '58. (MIRA 11:12)  
(Dredging machinery)

STARIKOV, Aleksandr Stepanovich; SKOROSHCHINSKIY, V.F., red.; ARISTOV,  
Yu.K., retsenzert; FEDYAYEVA, N.A., red. izd-va; YERMAKOVA,  
T.T., tekhn. red.

[Ways of improving the performance of river dredgers] Puti  
povysheniia proizvoditel'nosti rechnykh zemlesosov. Moskva,  
Izd-vo "Rechnoi transport," 1961. 92 p. (MIRA 15:2)  
(Dredging machinery)



SHIFER, D.G.; NESTEROV, L.N.; STARIKOV, A.S.

Carotid angiography in the diagnosis of cerebrovascular diseases.  
Zhur. nevr. i psikh. 64 no.10:1494-1497 '64. (MIRA 17:11)

1. Klinika nervnykh bolezney i neyrokhirurgii (zaveduyushchiy -  
prof. D.G. Shefer) Sverdlovskogo meditsinskogo instituta.

STARIKOV, A.V.

L-1050. EXPERIENCE OF THE ROOM AND PILLAR SYSTEM OF WORKING IN THE KIROV  
MINE. Starikov, A.V. (Ugol (Coal, Moscow), Sept. 1957, 14-17). The  
system has been used successfully in the Kirov mine of the Cherekhov coal  
field since 1934. Details are given. The system suits the Cherekhov  
field, and under suitable conditions could replace the long wall system  
elsewhere. (L).

STARIKOV, A. V., Cand Tech Sci (diss) -- "Conditions for using the chamber-column system of working inclined seams of average thickness in the Karaganda black-coal basin". Moscow, 1960. 17 pp (Acad Sci USSR, Inst of Mining), 230 copies (KL, No 15, 1960, 136)

SUDOPLATOV, Aleksey Pavlovich, prof.; PARUSIMOV, Vasiliy Fedorovich;  
GAPANOVICH, Leonid Nikolayevich; STARIKOV, Aleksey Vasil'yevich;  
SAKHAROV, Arkadiy Petrovich; BUTKEVICH, R.V., otv. red.;  
SMIRENSKIY, M.M., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Working coal deposits with short stoping faces] Razrabotka  
ugol'nykh mestorozhdenii korotkimi ochistnymi zabolami. Moskva,  
Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 303 p.  
(MIRA 15:3)

(Coal mines and mining)

SUNDUK'YAN, G.S.; BOYARINOV, A.K., retsenzents; STARIKOV, A.Ya., retsenzents;  
SIDOROV, A.G., redaktor; TSEPLYAYEVA, Z.S., redaktor; LABUS, G.A.,  
tekhnicheskii redaktor

[Warehouse economy and principles of storing crude hides and furs]  
Skladskoe khoziaistvo i osnovy khraneniia zhivotnovodcheskogo syr'ia  
i pushniny. Moskva, Gos. izd-vo tekhn. i ekon. lit-ry po voprosam  
zagotovok, 1953. 275 p. (MLBA 10:1)  
(Hides and skins--Storage)

STARIKOV, A. <sup>1</sup>/<sub>2</sub>, GERSHKOVITCH, N. L., METSENGEVITCH, M. R., KOVALEVA, R. V.,  
RUMYANTSEVA, A. V., PONOMAREVA, T. N., SIL'VESTROVA, T. N.

"New developments in the study of the natural focus of the plague in the  
northeastern Caspian region." p. 239

Desyatoye Soveshchaniye po parazitologicheskim problemam i  
prirodnootchagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference  
on Parasitological Problems and Diseases with Natural Foci 22-29  
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences  
USSR and Academy of Sciences USSR, No. 1 254pp.

Antiplague Observation Station, Moscow

STARIKOV, A.Ye.; POYARKOV, D.V.; SIL'VERSTOV, V.B.

Present border of the area and characteristics of the colonies  
of the gerbil *Rhombomys opimus* Licht. in the Ural-Emba Plain.  
Zool. zhur. 41 no.9:1402-1408 S '62. (MIRA 15:11)

1. Central Anti-Plague Observation Station, Ministry of Public  
Health of the U.S.S.R., Moscow.  
(Ural Valley—Gerbils) (Emba Valley—Gerbils)

SANPITER, I.A. (Moskva, G-248, Kutuzovskiy pr., d.11/7, kv.11);  
STARIKOV, A.Ye.

Case of spontaneous exit of a bullet through the bronchus.  
Vest.khir. 86 no.3:117-118 Mr '61. (MIRA 14:3)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (sav. - prof. I.S. Zhorov) sanitarno-gigiyenicheskogo fakul'teta 1-go Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova i gorodskoy klinicheskoy bol'nitsy No.61 g. Moskvy (gl. vrach - L.M. Vasilevskaya).  
(GUNSHOT WOUNDS) (LUNGS—WOUNDS AND INJURIES)



STARIKOV, G., mayor

Recharging decontamination sets. Voen. vest. 42 no.6:40  
Ja '62. (MIRA 15:6)  
(Decontamination (from gases, chemicals, etc.)

STARIKOV, G

F

349N/5  
729.4  
.S7

Lesa Poluostrova Kamchatki  
(Forests of the Kamchatka Peninsula, by)  
G. F. Starikov (1) P. N. D'yakonov.  
Moskva, Goslesbumizdat, 1952.

116 (2) p. Illus., Diagr., Map, Tables.

"Literatura": p. 115-(117)

STARIKOV, G. F.

5727. STARIKOV, G. F. Iesa Poluostroya Kamchatki. Izd. 2-Ye Pererabot. Khabarovsk, Kn. izd., 1954. 152 s. s Ill.; 1 L. Skem. 20sm. 5,000 Ekz. 4r V per.--Bibliogr: s. 143-147 (91 Naz v.)-(55-1422) 634.94(57.343.5)/G16.3)

SO. Knizhnaya, Letopis, Vol. 1, 1955

STARIKOV, G.F.

STARIKOV, G.F.

Larch in Magadan Province. Vop.geog.Dal'.Vost. no.3:55-68 '57.  
(MIRA 10:12)

(Magadan Province--Larch)

STARIKOV, G.F.

STARIKOV, G.F.; D'YAKONOV, P.N.

Fires in the foliated forests of the Amur Valley. Vop.geog.  
Dal'.Vost.no.3:150-153 '57. (MIRA 10:12)  
(Amur Valley--Forest fires)

STARIKOV, G.F.

AUTHORS: Nikol'skaya, V.V. and Chichagov, V.P.

12-1-20/26

TITLE: Some New Books from the Magadan Publishing House (O nekotorykh novykh knigakh Magadanskogo knizhnogo izdatel'stva)

PERIODICAL: Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva, 1958, # 1, pp 93 - 95 (USSR)

ABSTRACT: The authors review several books of interest to geographers. "The Chukotka Forests" (Lesa Chukotki) by G.F. Starikov and P.N. D'yakonov represents a collection of material gathered over 10 years of bioecological investigations. The reviewer states that inspite of some deficiencies the book is a valuable scientific work.

"The Chukotka National Okrug" (Chukotskiy natsional'nyy okrug) by I.V. Gushchin and A.I. Afanas'yev contains historical and geographical essays, which are sometimes superficial.

"Agriculture of the Magadan Oblast' " (Sel'skoye khozyaystvo Magadanskoy oblasti.) by A.P. Vas'kovskiy, P.P. Pasechnik, S.V. Fadryga, and O.K. Chalenko, tells of the experiences of agricultural workers of the Magadan oblast', which is the more interesting because of the utilization of new areas

Card 1/2

Some New Books From the Magadan Publishing House

12-1-20/26

in the north. In spite of the many of authors the book is a complete and finished work.

"A Volcano in the Polar Region" (Vulkan v. Zapolyar'ye by Ye.K. Ustiyev is a description of a trip to an extinct volcano in the Anyuy river basin which is of great interest to geographers.

AVAILABLE: Library of Congress

Card 2/2

STARIKOV, G.F.

Chermesidae aphids in forests along the northern shore of the Sea  
of Okhotsk. Soob.DVFA SSSR no.11:145-147 '59. (MIRA 13:11)

1. Khabarovskoye krayevoye upravleniye lesnogo khozyaystva.  
(Okhotsk Sea region--Plant lice)



STARIKOV, G.F., kand.sel'skokhozyaystvennykh nauk (Khabarovsk)

Relict grove of Manchurian ash. Priroda 50 no. 2:68-69 F '61.  
(MIRA 14:2)

(Kamara Valley—Ash (Tree))

SEMIKOV, D.F.

Sparse lichenous larch forests in the mountain of Magadan Province.  
Ochr. prir. na Dal'. Vest. no. 1:87-89 '63.

(MIRA 18:7)

1. Dal'nevostochnyy nauchno-issledovatel'skiy institut lesnogo  
khozyaystva.

STARIKOV, G. M.

STARIKOV, G. M. "An analysis of firearm wounds of the 'lor' (otorhinolaryngological?) organs", Trudy Smol. gos. med. in-ta, Vol. II, 1948, p. 190-95.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

KHANINA, E.M.; KAREVA, V.A.; KHANIN, S.G., kandidat meditsinskikh nauk, direktor; STARIKOV, G.M., kandidat meditsinskikh nauk, direktor; PETRYAYEVA, A.T., professor, zaveduyushchaya.

Immunoprophylaxis of measles with gamma globulin. *Pediatrics* no.2:6-8 Mar-  
Ap '53. (MLBA 6:5)

1. Smolenskiy institut epidemiologii i mikrobiologii (for Khanin).
2. Kafedra pediatrii Smolenskogo meditsinskogo instituta (for Petryayeva).
3. Smolenskiy meditsinskiy institut (for Starikov). (Measles) (Gamma Globulin)